U S. ENVIRONMENTAL PROTECTION AGENCY POLLUTION/SITUATION REPORT

Crawford Station Former MGP - Removal Polrep Initial Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY Region V

Subject:

POLREP #1

Initial

Crawford Station Former MGP

B5HK Chicago, IL

Latitude: 41.8281420 Longitude: -87.7244220

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From:

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Date:

2/1/2012

Reporting Period: 2/2/2012 to 2/7/2012 ·

1. Introduction

1.1 Background

Site Number:

B5HK

Contract Number:

D.O. Number: Response Authority: CERCLA Action Memo Date: 10/12/2011 Response Type: Time-Critical

Response Lead:

PRP

Incident Category:

Removal Action

NPL Status:

Non NPL

Operable Unit:

Mobilization Date:

1/20/2012

Start Date:

1/31/2012

Demob Date: CERCLIS ID:

RCRIS ID:

ERNS No.:

ILN000510192

State Notification:

Completion Date:

FPN#:

Reimbursable Account #:

1.1.1 Incident Category

Time-critical removal action

1.1.2 Site Description

The former Crawford Station MGP Site is located in the City of Chicago, in the County of Cook. The site address is 3500 South Pulaski Road, Chicago, Illinois. approximately 260 acres, of which 107 acres is currently owned by the PRP, Peoples Gas Light and Coke Company (Peoples Gas). The portion owned by Peoples Gas is currently used as a natural gas regulating and metering facility. The Site is bounded on the south by the Chicago Sanitary and Ship Canal (the "Canal"), on the north by the Chicago and Illinois Western Railroad, on the west by the Chicago and Western Indiana Belt Line Railroad, and to the east by Pulaski Road. Various commercial/industrial buildings and uncovered storage areas exist on the remainder of the Site.

In 1921, the Koppers Company of Pittsburgh and Peoples Gas (n/k/a Integrys) entered into an agreement whereby Koppers built, financed, and operated a by-product coke plant at the Crawford Station. Peoples Gas bought the gas and coke manufactured at the plant for distribution to consumers. Peoples Gas then acquired the facility in 1928. By the late 1930s, the Crawford Station facility produced three types of gas: coke oven gas, carbureted water gas, and reformed natural gas. During the 1930s, several additions and modifications were made to the plant, including construction of a light oil refining plant, addition of liquefied petroleum ("LP") gas peak shaving facilities, and conversion of five of the nine water gas sets to produce reformed natural gas and later oil gas. Production was halted temporarily between 1958 and 1962 and permanently after 1963. The Crawford Station was retired in 1965. Dismantling of the Crawford Station began in 1956 starting with portions of the coke oven plant. The remainder of the Crawford Station was dismantled in 1965. Peoples Gas eventually sold 146 acres of the Crawford Station

property to First Industrial Realty Company in 1966.

The Site has been subdivided into 21 parcels, designated as Parcels A through U. The 3 key parcels that are the subject of this action memo are Parcels A, B, and O, located in the southwest corner of the Site and is approximately 14 acres (i.e., the removal action area or RAA).

1.1.2.1 Location

The site address is 3500 South Pulaski Road, Chicago, IL. The meridian coordinates of the site are latitude 41° 29' 29" north and longitude 87° 44' 14" west.

1.1.2.2 Description of Threat

A potential exposure risk is present in the RAA because of the existence of exposed MGP residual materials, including weathered tar at ground surface in multiple locations. Analysis of surface soil samples taken in the RAA during the 2001 investigation (see Attachment 4) indicated the presence of PAHs exceeding the State's TACO Tier 1 screening criteria for soil ingestion and corresponding Superfund RALs, as summarized in the following table:

Compound Name	TACO Tier 1 Screening Level	RAL	Reported Value (mg/kg)	
Benzo(a)anthracene	8	230	1,960	
Benzo(b)fluoranthene	8	230	1,150	
Benzo(a)pyrene	0.8	23	895	

MGP residuals in soil were identified at the surface, containing elevated levels of contaminants exceeding the State's TACO cleanup levels and EPA RALs as described above. Contaminated soil potentially could come in contact with people working nearby (this being an industrial/commercial park). Also, an occasional trespasser may come in contact with contaminated soil in the surface either through dermal contact or inhalation. Typical security measures, including fencing, are currently employed to limit potential exposure.

Neither the Canal nor the groundwater underneath the Site is used as a drinking water source at this time. Nor is it within a sensitive ecosystem. However, sediments in the Canal did reveal the presence of contaminants found in the RAA (e.g., PAHs), although the exact exposure pathway(s) for contaminants to migrate to the sediments is unknown at this time. It is not known at this point whether the levels of contaminants in the sediments have any adverse impact to the surrounding ecosystem. While this segment of the canal does not appear to be used for recreational fishing or boating, it is conceivable that such activities may be occurring upstream and/or downstream from this segment. Also, the Canal is a navigable waterbody that is used for commercial shipping between Lake Michigan and the Mississippi River. Possible dermal contact or ingestion of contaminated sediment could occur given the presence of human activity in the Canal.

1.1 3 Preliminary Removal Assessment/Removal Site Inspection Results

Various investigations were conducted at the Site by several environmental consultants over the years. An environmental assessment of the Site was performed in 1992 and intrusive site investigations were initiated in 2001. These investigations indicated the presence of volatile organic compounds (VOCs), PAHs, metals, and cyanide in groundwater and soil samples collected in various locations at the Site. Impacts were observed below the water table at depths of up to 26 feet in various borings. These impacts include staining, odors, tar saturated soil, and tar in fractures. Based on results from investigations performed to date, the thickness of the fill layer ranges from 0 to 11 feet across the Site. Evidence of impacts, including tar, tar in fractures, tar-coated sand, naphthalene-type odor, and sheen, have been observed at depths of up to 26 feet at various locations at the Site. VOCs, PAHs, metals, and cyanide were detected in soil samples collected in various locations at the Site. MGP-related constituents were also shown to be migrating mainly through fractures in the brown/gray silty clay unit of the aquifer below the Site.

Specific to Parcels A, B, and O, site investigations conducted in 2001 and 2002 revealed this area to be a source of contamination at the Site. Specifically, the RAA was characterized by a hard layer of tar saturated soils at ground surface to about 4 feet below ground surface (bgs). In addition, investigation findings indicated the presence of tar appearing in fractures in the brown/grey silty clay. The tar in fractures was noted as occurring at a depth of 8 to 13 feet bgs and averaging about 2 feet thick;

In October 2008, U.S. EPA and Integrys entered into an Administrative Order on Consent for Integrys to conduct a remedial investigation and feasibility study of the Site. It was apparent from the contaminants found in the soil and groundwater (e.g., BTEX and PAH), described in the 2001 and 2002 site investigations, that this was the result of past MGP operations and that the RAA is a continuing source of the contamination.

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

The conditions at the Crawford Station Former MGP site present an imminent and substantial endangerment to the public health, welfare, and the environment and meet the criteria for a time-critical removal action provided for in Section 300 415(b)(2) of the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), as amended, 40 C F.R Part 300

2.1.2 Response Actions to Date

The PRP mobilized at the site on January 23, 2012 with arrival of the trailer, followed by initial excavation work around the decontamination area on January 31, 2012

Prior actions performed at the Crawford Station site have included activities under the State's Leaking Underground Storage Tank (LUST) program and the Site Remediation Program (SRP) on Parcels D, J, K, N, and Q. These action were not associated with the manufactured gas plant

operations, however. In addition, limited soil excavation has also been conducted associated with the relocation of an overhead electrical line to an underground line on Parcels A and B. Also, limited soil excavation and disposal of material (approximately 45 cubic yards) was performed on Parcel O in conjunction with a gas pipeline improvement project

2.1.3 Enforcement Activities, Identity of Potentially Responsible Parties (PRPs)

Integrys Business Services (IBS or Integrys) is the potentially responsible party (PRP) that will be performing the time-critical removal action at this site, pursuant to the AOC, dated October 12, 2011 For administrative purposes, information concerning the enforcement strategy for this site is contained in the Enforcement Confidential Memorandum

2.1.4 Progress Metrics

Waste Stream	Medium	Quantity	Manifest #	Treatment	Disposal

2.2 Planning Section

2.2.1 Anticipated Activities

Conduct a time-critical removal action to mitigate threats to public health, welfare, and the environment in industrial, commercial, and residential areas adjacent to the Crawford Station Former MGP site in Chicago, Illinois. The response action is necessary to address the release and threat of future releases of hazardous materials in these adjacent areas.

2.2.1.1 Planned Response Activities

The PRP shall implement the U.S. EPA-approved Removal Action Work Plan for Crawford Station MGP Site (Revision 1), dated September 6, 2011. Main components of the approved work plan include the following provisions which require compliance with:

- Targeted excavation within defined RAA,
- Transportation and off-site disposal of excavated material;
- Backfilling with clean fill:
- Compliance with State and Local Requirements;
- Construction Quality Assurance Measures such as
 - o Air Monitoring
 - o Fugitive Emissions Management Plan
 - o Health and Safety Plan
 - Sampling and Analysis Plan;
- Schedule for Completion; and
- Submission of Completion Report

In addition, EPA has planned for the provision of post-removal Site control consistent with the provisions of Section 300.415(l) of the NCP. It is anticipated that any post-removal Site control will be undertaken by PRP.

Hazardous substances, pollutants or contaminants removed off-site pursuant to this removal action will be treated, stored, or disposed of at a facility in compliance, as

determined by EPA, with the Agency's Off-Site Rule, 40 CFR 300.440.

The project will continue until all contaminated soil identified in the approved work plan, up to about 150,000 cubic yards, is removed and disposed off-site.

2.2.1.2 Next Steps

Complete construction of decontamination pad

2.2.2 Issues

None.

2.3 Logistics Section

2.3 Logistics Section

Office trailer setup was completed January 23, 2012 Most, if not all, construction equipment was delivered to the site at the beginning of February 2012.

2.4 Finance Section

2.4.1 Narrative

This is an enforcement-lead time-critical removal action, with the PRP performing the work. The PRP has been and continues to be a cooperative party to this removal action. It made the initial proposal to conduct the work, prior to performing a remedial investigation (RI) pursuant to an AOC with EPA.

2.5 Other Command Staff

2.5.1 Safety Officer

A safety officer has been designated and a health and safety plan (HASP) in place for this removal action

2.5.2 Liaison Officer

The PRP has a public/press information officer that has been working with the City of Chicago on this and other MGP sites it owns at various locations in the city.

2.5.3 Public Information Officer

See above

3. Participating Entities

3.1 Unified Command

N/A. The PRP will be performing this action, with EPA providing oversight

3.2 Cooperating Agencies

City of Chicago Illinois EPA Metropolitan Water Reclamation District

4. Personnel On Site

4 Personnel On Site

EPA RPM CH2M Hill (EPA RAC II contractor)

5. Definition of Terms

N/A

6. Additional sources of information

6.1 Internet location of additional information/report

www.epaosc org/crawfordstation

6.2 Reporting Schedule

Quarterly

7. Situational Reference Materials

Located on the EPA OSC website under the document link for this site (see above).